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PLASTICS AND SYNTHETICS POINT SOURCE CATEGORY

Proposed Effluent Limitations and Guidelines for Existing Sources and Standards of Performance and Pretreatment Standards for New Sources

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 416]

[FRL 265-3]

PLASTICS AND SYNTHETICS POINT SOURCE CATEGORY

Proposed Effluent Limitations and Guidelines for Existing Sources and Standards of Performance and Pretreatment Standards for New Sources

Notice is hereby given that effluent limitations and guidelines for existing sources and standards of performance and pretreatment standards for new sources set forth in tentative form below are proposed by the Environmental Protection Agency (EPA). On April 5, 1974, EPA promulgated a regulation adding Part 416 to Chapter 40 of the Code of Federal Regulations (39 FR 12502). That regulation with subsequent amendments established effluent limitations and guidelines for existing sources and standards of performance and preteatment standards for new sources for the plastics and synthetics manufacturing point source category. The regulation proposed below will amend 40 CFR, Part 416—plastics and synthetics manufacturing point source category by adding thereto the ethylene vinyl acetate copolymers subcategory (Subpart N), the fluorocarbons subcategory (Subpart O), the polypropylene fiber subcategory (Subpart P), the alkyds and unsaturated polyester resins subcategory (Subpart Q), the cellulose nitrate subcategory (Subpart R), the polyamides (Nylon 6/12) subcategory (Subpart S), the polyester resins (thermoplastic) subcategory (Subpart T), the silicones subcategory (Subpart U), the epoxy resins subcategory (Subpart V), the phenolic resins subcategory (Subpart W), and the urea and melamine resins subcategory (Subpart X), pursuant to sections 301, 304 (b) and (c), 306(b) and 307(c) of the Federal Water Pollution Control Act as amended (33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316(b) and 1317(c); 86 Stat. 816 et seq.; Pub. L. 92-500) (the Act).

(a) *Legal authority.* (1) *Existing point sources.* Section 301(b) of the Act requires the achievement by not later than July 1, 1977, of effluent limitations for point sources, other than publicly owned treatment works, which require the application of the best practicable control technology currently available as defined by the Administrator pursuant to section 304(b) of the Act. Section 301(b) also requires the achievement by not later than July 1, 1983, of effluent limitations for point sources, other than publicly owned treatment works, which require the application of best available technology economically achievable which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator pursuant to section 304(b) of the Act.

Section 304(b) of the Act requires the Administrator to publish regulations providing guidelines for effluent limitations setting forth the degree of effluent reduction attainable through the application of the best practicable control technology currently available and the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods and other alternatives. The regulation proposed herein sets forth effluent limitations and guidelines, pursuant to sections 301 and 304(b) of the Act, for the ethylene vinyl acetate copolymers subcategory (Subpart N), the fluorocarbons subcategory (Subpart O), the polypropylene fiber subcategory (Subpart P), the alkyds and unsaturated polyester resins subcategory (Subpart Q), the cellulose nitrate subcategory (Subpart R), the polyamides (Nylon 6/12) subcategory (Subpart S), the polyester resins (thermoplastic) subcategory (Subpart T), the silicones subcategory (Subpart U), the epoxy resins subcategory (Subpart V), the phenolic resins subcategory (Subpart W), and the urea and melamine resins subcategory (Subpart X), of the plastics and synthetics manufacturing point source category.

(2) *New sources.* Section 306 of the Act requires the achievement by new sources of a Federal standard of performance providing for the control of the discharge of pollutants which reflects the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants.

Section 306(b)(1)(B) of the Act requires the Administrator to propose regulations establishing Federal standards of performance for categories of new sources included in a list published pursuant to section 306(b)(1)(A) of the Act. The Administrator published in the FEDERAL REGISTER of January 16, 1973, (38 FR 1624) a list of 27 source categories, including the plastics and synthetics manufacturing category. The regulations proposed herein set forth the standards of performance applicable to new sources for ethylene vinyl acetate copolymers subcategory (Subpart N), the fluorocarbons subcategory (Subpart O), the polypropylene fiber subcategory (Subpart P), the alkyds and unsaturated polyester resins subcategory (Subpart Q), the cellulose nitrate subcategory (Subpart R), the polyamides (Nylon 6/12) subcategory (Subpart S), the polyester resins (thermoplastic) subcategory (Subpart T), the silicones subcategory (Subpart U), the epoxy resins subcategory (Subpart V), the phenolic resins subcategory (Subpart W), and the urea and melamine resins subcategory (Subpart X) of the plastics and synthetics manufacturing category.

Section 307(c) of the Act requires the Administrator to promulgate pretreatment standards for new sources at the same time that standards of performance for new sources are promulgated pursuant to section 306. Sections 416.146, 416.156, 416.166, 416.176, 416.186, 416.196, 416.206, 416.216, 416.226, 416.236, and 41.246, proposed below, provide pretreatment standards for new sources within the ethylene vinyl acetate copolymers subcategory (Subpart N), the fluorocarbons subcategory (Subpart O), the polypropylene fiber subcategory (Subpart P), the alkyds and unsaturated polyester resins subcategory (Subpart Q), the cellulose nitrate subcategory (Subpart R), the polyamides (Nylon 6/12) subcategory (Subpart S), the polyester resins (thermoplastic) subcategory (Subpart T), the silicones subcategory (Subpart U), the epoxy resins subcategory (Subpart V), the phenolic resins subcategory (Subpart W), and the urea and melamine resins subcategory (Subpart X) of the plastics and synthetics manufacturing point source category.

Section 304(c) of the Act requires the Administrator to issue to the States and appropriate water pollution control agencies information on the processes, procedures or operating methods which result in the elimination or reduction of the discharge of pollutants to implement standards of performance under section 306 of the Act. The report or "Development Document" referred to below provides, pursuant to section 304(c) of the Act, information on such processes, procedures or operating methods.

(b) *Summary and basis of proposed effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for New Sources.* (1) *General methodology.* The effluent limitations, guidelines and standards of performance proposed herein were developed in the following manner. The point source category was first studied for the purpose of determining whether separate limitations and standards are appropriate for different segments within the category. This analysis included a determination of whether differences in raw material used, product produced, manufacturing process employed, age, size, waste water constituents and other factors require development of separate limitations and standards for different segments of the point source category. The raw waste characteristics for each such segment were then identified. This included an analysis of the source, flow and volume of water used in the process employed, the sources of waste and waste waters in the operation and the constituents of all waste water. The constituents of the waste waters which should be subject to effluent limitations and standards of performance were identified.

The control and treatment technologies existing within each segment were identified. This included an identification of each distinct control and treatment technology, including both in-plant and end-of-process technologies, which is existent or capable of being designed for each segment. It also included an identification of, in terms of the amount of constituents and the chemical, physical, and biological characteristics of pollutants, the effluent level resulting from the ap-

plication of each of the technologies. The problems, limitations and reliability of each treatment and control technology were also identified. In addition, the nonwater quality environmental impact, such as the effects of the application of such technologies upon other pollution problems, including air, solid waste, noise and radiation, was identified. The energy requirements of each control and treatment technology were determined as well as the cost of the application of such technologies.

The information, as outlined above, was then evaluated in order to determine what levels of technology constitute the "best practicable control technology currently available," "best available technology economically achievable" and the "best available demonstrated control technology, processes, operating methods, or other alternatives." In identifying such technologies, various factors were considered. These included the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, nonwater quality environmental impact (including energy requirements) and other factors.

The data upon which the above analysis was performed included EPA permit applications, EPA sampling and inspections, consultant reports, and industry submissions.

The pretreatment standards proposed herein are intended to be complementary to the pretreatment standards proposed for existing sources under 40 CFR 128. The basis for such standards is set forth in the FEDERAL REGISTER of July 19, 1973, 38 FR 19236. The provisions of Part 128 are equally applicable to sources which would constitute "new sources" under section 306 if they were to discharge pollutants directly to navigable waters, except for § 128.133. That section provides a pretreatment standard for "incompatible pollutants" which requires application of the "best practicable control technology currently available," subject to an adjustment for amounts of pollutants removed by the publicly owned treatment works. Since the pretreatment standards proposed herein apply to new sources, §§ 416.146, 416.156, 416.166, 416.176, 416.186, 416.196, 416.206, 416.216, 416.226, 416.236, 416.246, and 416.256 below amend § 128.133 to specify the application of the standard of performance for new sources rather than the "best practicable" standard applicable to existing sources under sections 301 and 304(b) of the Act.

(2) Summary of conclusions with respect to the ethylene vinyl acetate copolymers subcategory (Subpart N), the fluorocarbons subcategory (Subpart O), the polypropylene fiber subcategory (Subpart P), the alkyds and unsaturated polyester resins subcategory (Subpart Q), the cellulose nitrate subcategory (Subpart R), the polyamides (Nylon 6/12) subcategory (Subpart S), the polyester resins (thermoplastic) subcategory (Subpart T), the silicones subcategory (Subpart U), the epoxy resins subcategory (Subpart V), the phenolic resins subcategory (Subpart W), and the urea and melamine resins subcategory (Subpart X) of the plastics and synthetics manufacturing point source category.

(i) *Categorization.* For the purpose of studying waste treatment and effluent limitations, the plastics and synthetics manufacturing category was divided into discrete product subcategories which coincide with a breakdown of the category as outlined in the Development Document. The plastics and synthetics manufacturing industry parameters allowing the most effective categorization were found to be waste water characteristics, specifically: raw waste load, with a BOD5 value of greater than 10 kg/kkg (lb/1000 lb) defined as high raw waste load and raw waste load with a BOD5 value of less than 10 kg/kgg (lb/1000 lb) defined as low raw waste load; attainable BOD5 concentrations (as demonstrated by plastics and synthetics plants using technologies which are defined herein as the basis for best practicable control technology currently available) under 20 ppm BOD5 defined as low attainable BOD5 concentrations; attainable BOD5 concentrations of 30 ppm—75 ppm defined as medium attainable BOD5 concentrations; and attainable BOD5 concentrations of above 75 ppm defined as high attainable BOD5 concentrations.

Based on these two dimensions of categorization, four major groupings were defined: Grouping I—low waste load, low attainable BOD5 concentration: ethylene vinyl acetate, fluorocarbons, polypropylene fibers, and polyvinylidene chloride; Grouping II—high waste load, low attainable BOD5 concentrations: acrylic resins, and cellulose derivatives; Grouping III—high waste load, medium attainable BOD5 concentrations: alkyds and unsaturated polyester resins, cellulose nitrate, polyamides (Nylon 6/12), polyesters (thermoplastic), polyvinylbutyral, silicones, and epoxy resins; Grouping IV—high waste load, high attainable BOD5 concentrations: nitrile barrier resins, spandex fibers, phenolic resins, and urea and melamine resins.

Additional subcategorization within the above four major groupings was necessary to account for the waste water generation which is specific to the individual products and their various processing methods. For several of the products listed in the groupings, it was determined that the relatively few producers used different processes, had widely varying waste water flows, or commercial production had not yet been achieved. These products include polyvinylidene chloride, acrylic resins, cellulose derivatives, polyvinylbutyral, nitrile barrier resins and spandex fibers. Since it is not possible to arrive at standards which would be applicable to all facilities with the groupings, no standards are presented for these products. However, the methodology for determining permit conditions on a case by case basis may be found in the "Development Document."

The separation of the remaining products into separate subcategories simplifies the application of the effluent limitation guidelines and standards of performance by providing clear and unambiguous direction as to the proper standard applicable to that product. The substantial advantage of clarity appears to outweigh any technical advantages of product groupings. Hence, for these reasons the following product subcategorization is used for the application of effluent limitation guidelines and standards, and standards of performance in this segment of the category.

(1) *Subpart N—Ethylene Vinyl Acetate Copolymers Subcategory.* This subpart is applicable to the discharges of process waste water pollutants and other waste water pollutants resulting from the reaction of vinyl acetate with ethylene, and from associated processing to manufacture ethylene vinyl acetate copolymers.

(2) *Subpart O—Fluorocarbons Subcategory.* This subpart is applicable to the discharges of process waste water pollutants and other waste water pollutants resulting from the manufacture of additional type polymers in which all, or a significant portion, of the substituted groups on the carbon atoms in the polymer chain are fluorine and from associated processing to manufacture fluorocarbons.

(3) *Subpart P—Polypropylene Fiber Subcategory.* This subpart is applicable to the discharges of process waste water pollutants and other waste water pollutants resulting from the manufacture of polypropylene fibers from polypropylene and from associated processing.

(4) *Subpart Q—Alkyds and Unsaturated Polyester Resins Subcategory.* This subpart is applicable to the discharges of process waste water pollutants and other waste water pollutants resulting from the manufacture of alkyds and unsaturated polyester resins and from associated processing.

(5) *Subpart R—Cellulose Nitrate Subcategory.* This subpart is applicable to the discharges of process waste water pollutants and other waste water pollutants resulting from the reaction of fibrous cellulose with a mixture of sulfuric and nitric acids and from associated processing to manufacture cellulose nitrate.

(6) *Subpart S—Polyamides (Nylon 6/12) Subcategory.* This subpart is applicable to the discharges of process waste water pollutants and other waste water pollutants resulting from the manufacture of Nylon 6/12 and from associated processing.

(7) *Subpart T—Polyester Resins (Thermoplastic) Subcategory.* This subpart is applicable to the discharges of process waste water pollutants and other waste water pollutants resulting from the manufacture of the saturated polyester polymers based on poly (ethylene terephthalate) and poly (butylene terephthalate) and from associated processing.

(8) *Subpart U—Silicones Subcategory.* This subpart is applicable to the dis-

charges of process waste water pollutants and other waste water pollutants resulting from the manufacture of silicone fluids, greases, emulsions, rubbers, and resins from associated processing.

(9) *Subpart V—Epoxy Resins Subcategory.* This subpart is applicable to the discharges of process waste water pollutants and other waste water pollutants resulting from the reaction between epichlorohydin and bisphenol A and/or other reactants which create an epoxy group within the resin and from associated processing to manufacture epoxy resins.

(10) *Subpart W—Phenolic Resins Subcategory.* This subpart is applicable to the discharges of process waste water pollutants and other waste water pollutants resulting from the reaction of phenol or a substituted phenol such as creosol or resorcinol and an aldehyde such as formaldehyde or acetaldehyde and from associated processing to manufacture phenolic resins.

(11) *Subpart X—Urea and Melamine Resins Subcategory.* This subpart is applicable to the discharges of process waste water pollutants and other waste water pollutants resulting from the reaction of urea or melamine with formaldehyde and from associated processing to manufacture urea or melamine resins.

(ii) *Waste characteristics.* The ranges of raw waste loads reported in this segment of the plastics and synthetics industry vary from 0 to 220 kg/kkg of product for BOD5, from 0.8 to 950 for COD, and from 0 to 50 for suspended solids. BOD5, COD and suspended solids are the critical constituents requiring guidelines and standards.

Other constituents are even more specific to the product subcategory, and are summarized below.

Subcategory:	*Other element or compound*
Alkyd compounds and unsaturated polyester resins.	Lead, Cobalt.
Fluorocarbons	Fluorides.
Spandex fibers	Cyanides, Oil and Grease, Organic Nitrogen.
Acrylic resins	Oil and Grease.
Polypropylene fiber.	Oil and Grease, Phosphates.
Nitrile barrier resins.	Organic Nitrogen, Cyanides.
Polyamides	Organic Nitrogen
Cellulose derivatives.	Inorganic Nitrogen
Cellulose nitrate	Inorganic Nitrogen
Silicones	Polychlorinated Organics, Copper, Fluorides.
Polyvinylidene chloride.	Polychlorinated Organics.
Polyester resins (thermoplastic).	Cobalt, Manganese, Cadmium.
Epoxy resins	Phenolic Compounds
Phenolic resins	Phenolic Compounds
Urea and melamine resins.	Organic Nitrogen.

Effluent limitations guidelines and standards and standards of performance are proposed for phenolic compounds, copper, mercury, fluorides, cyanides, oil and grease, and cadmium for the specified product. The additional pollutant parameters of inorganic nitrogen, organic nitrogen, phosphate, polychlorinated organics, sulfur compounds, manganese and cobalt were selected because they are known to be used in the processes or to occur in the waste waters of specific product subcategories. However, insufficient data was available on raw waste loads or treated waste waters to permit proposing guidelines and standards at this time. In most cases where metals are used, the pH adjustments and additions of precipitating agents and flocculants associated with biological treatment systems reduce or remove them to low concentration levels. The above pollutant parameters should be considered to be present in the specific product subcategories as previously summarized. Receiving water quality standards should determine if limitations are necessary.

(iii) *Origin of waste water pollutants.* Waste water generated by this segment of the plastics and synthetics industry contains monomers, monomer impurities, reaction by-products, catalysts, surfactants, accelerators, inhibitors, lubricants and others and originate from the following sources: product purification, equipment cleanup, leaks and spills, scrubber operation, utility blowdowns, maintenance procedures and others.

(iv) *Treatment and control technology.* Waste water treatment and control technologies have been studied for each subcategory of the industry to determine what is (a) the best practicable control technology currently available, (b) the best available technology economically achievable, and (c) the best available demonstrated control technology, processes, operating methods or other alternatives.

Control and treatment technology currently in use by the industry includes equalization, chemical treatment, precipitation, settling, biological systems (activated sludge, aerated lagoons, aerobic-anaerobic lagoons, trickling filters, extended containment, etc.), clarification, filtration, polishing lagoons, and incineration. Most of these technologies are generally applicable across the entire plastics and synthetics industry.

Potentially applicable control and treatment technology includes adsorption (activated carbon, adsorbent floc), multi-media filtration, chemical precipitation, chemical treatments, anaerobic processes, air or steam stripping, foam separation, algal systems, wet air oxidation, incineration, liquid extraction, ion exchange, reverse osmosis, freeze thaw, evaporation, and electrodialysis. Most of these technologies are for the removal of specific pollutant parameters and can be applied in cases where the pollutant parameter is a problem.

In-plant technology and controls which are currently in practice in the plastics and synthetics industry include segregation of contact process waste water from noncontact waste water, elimination of once-through barometric condensers, control of leaks, and good housekeeping practices.

Best practicable control technology currently available (BPCTCA) for existing point sources is based on the application of end-of-pipe technology such as biological treatment for BOD reduction as typified by activated sludge, aerated lagoons, trickling filters, aerobic-anaerobic lagoons, etc., with appropriate preliminary treatment typified by equalization to dampen shock loadings, settling, clarification and chemical treatment, for removal of suspended solids, oils, other elements, and pH control and subsequent treatment typified by clarification and polishing processes for additional BOD5 and suspended solids removal and dephenolizing units for the removal of phenolic compounds where applicable. The phenolic compounds limits are based on currently operating plants using activated carbon systems, and a multiproduct plant using biological treatment. Any information received during the public comment period relating to these treatment systems and the costs of these facilities will be given full consideration prior to promulgation. Application of in-plant technology and changes which may be helpful in meeting BPCTCA include segregation of contact process waste waters from noncontact waste waters, elimination of once-through barometric condensers, control of leaks, and good housekeeping practices.

Best available technology economically achievable (BATEA) for existing point sources is based on the best in-plant practices of the industry which minimize the volume of waste generating water as typified by segregation of contact process waters from noncontact waste water, maximum waste water recycle and reuse, elimination of once-through barometric condensers, control of leaks, good housekeeping practices, etc., and end-of-pipe technology for the further removal of suspended solids and other elements typified by media filtration, chemical treatment, etc., and further COD removal as typified by the application of adsorption processes such as activated carbon and adsorptive flocs, and incineration for the treatment of highly concentrated small volume wastes, and additional biological treatment for further BOD5 removal as needed.

Best available demonstrated technology (BADT) for new source performance standards (NSPS) are based on BPCTCA and the maximum possible reduction of process waste water generation as demonstrated by the industry subcategory and the application of media filtration and chemical treatment for additional suspended solids and other element removal and additional biological treatment for further BOD5 removal as needed.

The effluent from a properly designed and operated treatment plant changes continually due to (a) changes in product mix, production rate, climatic conditions, and reaction chemistry, which influence the composition of raw waste load and, therefore, its treatability; and (b) changes in biological factors which influence the efficiency of the treatment process. A common indicator of the

strength of the discharge from a plant is the long-term average of the effluent load. The long-term (e.g., design or yearly) average is not a suitable parameter on which to base an enforcement standard. However, by the use of data which shows the variability in the effluent load, statistical analysis can be applied to compute short-term limits (monthly or daily) which should not be exceeded, provided that the plant is designed and run in the proper way to achieve the desired long-term average load. The levels of technology for BPCTCA, BATEA, and BADT take into account this variability as determined from properly designed and operated treatment plants.

Solid waste control must be considered. Best practicable control technology and best available control technology as they are known today require disposal of the pollutants removed from waste waters in this industry in the form of solid wastes and liquid concentrates. In most cases these are nonhazardous substances requiring only minimal custodial care. However, some constituents may be hazardous and may require special consideration. In order to ensure long term protection of the environment from these hazardous or harmful constituents, special consideration of disposal sites must be made. All landfill sites where such hazardous wastes are disposed should be selected so as to prevent horizontal and vertical migration of these contaminants to ground or surface waters. In cases where geologic conditions may not reasonably ensure this, adequate precautions (e.g. impervious liners) should be taken to ensure long term protection to the environment from hazardous materials. Where appropriate, the location of solid hazardous materials disposal sites should be permanently recorded in the appropriate office of legal jurisdiction in which the site is located.

(v) *Cost estimates for control of waste water pollutants.* Approximately 240 plant locations participate in the manufacture of the 18 synthetic polymer products listed in the categorization section. Some of the company operations include multiplant divisions and others are part of multiproduct plants. A large number of plants discharge to municipal treatment systems. Total production of these products during 1972–73 was estimated at 2.2 million kkg (4.8 billion lbs) per year. The 1972–73 water usage was estimated at 112 thousand cubic meters (30 MGD) per day and is expected to increase 7–10 percent per year through 1977.

Annual costs of treatment for the 18 products for 1977 (BPCTCA) was estimated at seven million dollars. The annual cost for 1983 was estimated at 18.6 million dollars and for new sources by 1977 at 5.3 million dollars.

(vi) *Energy requirements and nonwater quality environmental impacts.* The energy requirements for this segment of the plastics and synthetics industry is minimal, requiring an increase of less than 1 percent of the industries current power consumption. Other nonwater quality aspects of the treatment and control technology for the plastics and synthetics industry are related to (1) the disposal of solids or slurries resulting from waste water treatment and in-process plant control methods, (2) the generation of a by-product of commercial value, (3) disposal of off-specification and scrap products, and (4) the creation of problems of air pollution and land utilization. The nonwater quality aspects of treatment and pollution control are minimal in this industry and largely depend upon the type of waste water treatment technology employed. In general, noise levels from typical waste water treatment plants are not excessive. If incineration of waste sludges is employed, there is a potential for air pollution, principally particulates and possible nitrogen oxides, although stack emission devices exist for control of these problems. There are no radioactive nuclides used within the industry, other than in instrumentation, so that no radiation report problems will be encountered. Odors from the waste water treatment plants may cause occasional problems since heavy, stable foams occur on aerated basins. But in general, odors are not expected to be a significant problem when compared with odor emissions possible from other plant sources.

(vii) Economic impact analysis. Generally, the costs of compliance are low and are not expected to significantly affect prices, industry production, employment, or growth. These costs usually can be passed on to the consumer through price increases ranging from approximately .1 to 2.1 percent for 1977 with an additional zero to 8.6 percent in 1983. However, in two segments, unsaturated and thermoplastic polyester resins, producers may have to absorb these costs in their profit margins. As a result, it is estimated that two to three plants in the unsaturated polyester segment and one plant producing thermoplastic polyesters may close. The unsaturated polyester plants represent less than one percent of the segment's total productive capacity. The thermoplastic polyester plant is one of three in the industry and, thus, represents a significant percent of current productive capacity; however, it is expected to represent a smaller portion of future capacity for this growing product segment. Approximately thirty employees would be affected by the closures; however, there should be no significant impact on the local communities, balance of trade, or industry growth for these segments.

The economic analysis covered all product segments being proposed for the first time. For the four product segments currently being reproposed—epoxy, melamine, phenolic and urea resins—the impacts were assessed in the economic analysis which was performed when these subcategories were proposed initially. At that time, it was concluded that only minimal impacts would occur in any of these segments. However, recent information has indicated that greater impacts may in fact exist for the phenolics subcategory. An addendum analysis of this segment will be conducted to determine if the conclusions of the initial analysis are still valid. Any information received during the public comment period relating to these plants and the impacts of the proposed regulations will be given full consideration prior to promulgation.

The reports entitled "Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Synthetic Polymer Segment of the Plastics and Synthetics Manufacturing Point Source Category" and "Addendum to the Development Document for Effluent Limitation Guidelines and Standards of Performance for the Synthetic Resins Segment of the Plastics and Synthetics Manufacturing Point Source Category" detail the analysis undertaken in support of the regulation being proposed herein and are available for inspection in the EPA Information Center, Room 227, West Tower, Waterside Mall, Washington, D.C., at all EPA regional offices, and at State water pollution control offices. A supplementary analysis prepared for EPA of the possible economic effects of the proposed regulation is also available for inspection at these locations. Copies of both of these documents are being sent to persons or institutions affected by the proposed regulation or who have placed themselves on a mailing list for this purpose (see EPA's advance notice of public review procedures, 38 FR 21202, August 6, 1973). An additional limited number of copies of both reports are available. Persons wishing to obtain a copy may write the EPA Information Center, Environmental Protection Agency, Washington, D.C. 20460, Attention: Mr. Philip B. Wisman.

On June 14, 1973, the Agency published procedures designed to insure that, when certain major standards, regulations, and guidelines are proposed, an explanation of their basis, purpose and environmental effects is made available to the public (38 FR 15653). The procedures are applicable to major standards, regulations and guidelines which are proposed on or after December 31, 1973, and which prescribe national standards of environmental quality or require national emission, effluent or performance standards and limitations.

The Agency determined to implement these procedures in order to insure that the public was apprised of the environmental effects of its major standards setting actions and was provided with detailed background information to assist it in commenting on the merits of a proposed action. In brief, the procedures call for the Agency to make public the information available to it delineating the major nonenvironmental factors affecting the decision, and to explain the viable options available to it and the reasons for the option selected.

The procedures contemplate publication of this information in the FEDERAL REGISTER, where this is practicable. They provide, however, that where, because of the length of these materials, such publication is impracticable, the material

may be made available in an alternate format.

The report entitled "Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Synthetic Polymer Segment of the Plastics and Synthetics Manufacturing Industry Point Source Category" contains information available to the Agency concerning the major environmental effects of the regulation proposed below, including:

(1) The pollutants presently discharged into the Nation's waterways by manufacturers of plastics and synthetics and the degree of pollution reduction obtainable from implementation of the proposed guidelines and standards (see particularly Sections IV, V, VI, IX, X, and XI);

(2) The anticipated effects of the proposed regulation on other aspects of the environment including air, solid waste disposal and land use, and noise (see particularly Section VIII); and

(3) Options available to the Agency in developing the proposed regulatory system and the reasons for its selecting the particular levels of effluent reduction which are proposed (see particularly Sections VI, VII, and VIII).

The supplementary report entitled "Economic Analysis of Proposed Effluent Guidelines Plastics and Synthetics Industry" contains an estimate of the cost of pollution control requirements and an analysis of the possible effects of the proposed regulation on prices, production levels, employment, communities in which plastics and synthetics manufacturing plants are located, and international trade. In addition, the Development Document describes, in Section VIII, the cost and energy consumption implications of the proposed regulations.

The two reports described above in the aggregate exceed 300 pages in length and contain a substantial number of charts, diagrams, and tables. It is clearly impracticable to publish the material contained in these documents in the FEDERAL REGISTER. To the extent possible, significant aspects of the material have been presented in summary form in foregoing portions of this preamble. Additional discussion is contained in the following analysis of comments received and the Agency's response to them. As has been indicated, both documents are available for inspection at the Agency's Washington, D.C. and regional offices and at State water pollution control agency offices. Copies of each have been distributed to persons and institutions affected by the proposed regulations or who have placed themselves on a mailing list for this purpose. Finally, so long as the supply remains available, additional copies may be obtained from the Agency as described above.

When this regulation is promulgated, revised copies of the Development Document will be available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Copies of the Economic Analysis will be available through the National Technical Information Service, Springfield, Virginia 22151.

(c) *Summary of public participation.* Prior to this publication, the agencies and groups listed below were consulted and given an opportunity to participate in the developments of effluent limitations, guidelines and standards proposed for the plastics and synthetics manufacturing category. All participating agencies have been informed of project developments. An initial draft of the Development Document was sent to all participants and comments were solicited on that report. The following are the principal agencies and groups consulted: (1) Effluent Standards and Water Quality Information Advisory Committee (established under section 515 of the Act); (2) all State and U.S. Territory Pollution Control Agencies; (3) Department of Commerce; (4) Department of Interior; (5) Water Resources Council; (6) Department of Defense; (7) Atomic Energy Commission; (8) Department of Health, Education, and Welfare; (9) American Society of Mechanical Engineers; (10) The Conservation Foundation; (11) Environmental Defense Fund, Inc.; (12) Natural Resources Defense Council; (13) American Society of Civil Engineers; (14) Water Pollution Control Federation; (15) National Wildlife Federation; (16) American Institute of Chemical Engineers; (17) Synthetic Organic Chemical Manufacturers Association; (18) Manufacturing Chemists Association; (19) New England Interstate Water Pollution Control Commission; (20) Ohio River Valley Sanitation Commission; and (21) Delaware River Basin Commission.

The following responded with comments: (1) States of North Carolina, New York, California, and Illinois; (2) Department of Health, Education and Welfare; (3) Department of Interior; (4) Department of Commerce; (5) Delaware River Basin Commission; (6) U.S. Water Resources Council; (7) U.S. Industrial Chemicals Company; (8) Dow Corning; (9) SWS Silicones; (10) Manufacturing Chemists Association; (11) Union Carbide Corporation; and (12) Monsanto.

The primary issues raised in the development of the proposed effluent limitations guidelines and standards of performance and the treatment of these issues herein are as follows:

(1) A commenter stated that the BADT–NSPS waste water flow basis appears to be especially restrictive for ethylene vinyl acetate copolymer, polypropylene fibers, and alkyds and unsaturated polyester resins. Specifically the commenter stated that the effluent limitations for alkyds and unsaturated polyester resins is not zero as implied.

The data base supports the waste water flow basis with the changes as proposed in the "Development Document." Alkyds and unsaturated polyester resins are not zero discharge in the proposed regulations.

(2) A commenter stated that the total cost for BPCTCA is estimated at $5.04 million/yr for approximately 60 plants or $80,000/year plant which is an amount barely sufficient to provide full time operation. The commenter stated that costs for operations and maintenance seem low.

Most of the plants in this segment of the plastics and synthetics industry discharge into municipal systems or multiplant systems. The costs assessed against these segments of the industry are apportioned on the bases of treatment plants with capacity larger than the specific waste water flows, thereby taking into consideration the advantages of lower costs per unit of pollutant removed that results because of treatment plant size. Either case supports the low cost per plant estimate as stated by the commenter. Cost for operations and maintenance is based on data obtained from industry.

(3) A commenter stated that the average draft development document reporting operating costs seems unreasonable since the BADT–NSPS costs are approximately the same as BPCTCA cost though the BADT–NSPS requirements are more nearly equal to the BATEA levels.

The costs for BADT-NSPS are based on new plants which are assumed to be designed for lower flows at higher production rates with technology similar to BPCTCA. Based on this, BADT–NSPS costs are expected to be closer to BPCTCA cost than BATEA cost levels.

(4) A commenter stated that the incremental cost to go from BPCTCA to BATEA is not cost effective on a solids removal basis.

The calculated cost effectiveness by the commenter appears to be based on assuming solids to include both dissolved and suspended; however, since some of these solids, especially the dissolved solids, are biologically active or long-lived environmentally, the effectiveness of their removal should also consider the benefits that accrue to the environment. Because assessment of the latter is extremely difficult and imprecise, the BATEA standards and costs were developed to insure that the best available technology could be economically achieved.

(5) A commenter stated that the cost of treatment is grossly understated by comparison with the sales price of a finished product. They suggested that a better measure would be cost of treatment as a percentage of profits represented since it cannot be assumed that domestic and overseas competition will allow a price increase to recover the increased cost.

Although data on the profitability of individual products is difficult to obtain, the economic analysis has attempted to evaluate the costs of treatment in relation to industry profits. In addition, the industry's ability to pass on treatment costs through price increases and the effect of those price increases on the domestic and international demand for these products has been evaluated.

(6) A commenter suggested that guidelines for pH be established.

Guidelines for pH are being proposed in this regulation.

(7) One commenter stated that guidelines should be established for industries producing polymers in less than one million pound quantities and/or which have less than three manufacturing facilities. The commenter noted that there are 20 such plants.

Such products are generally manufactured on a custom basis or in a multiproduct facility. Data collection and analysis must, therefore, be done on a plant by plant basis. It is not feasible to develop uniform guidelines and standards which would apply to all of these facilities.

(8) A commenter suggested that the 20 mg/l basis for fluoride in the fluorocarbons subcategory was high.

In the fluorocarbon industry the raw waste load contains a minimal amount of fluoride which in some cases already meets the 20 mg/l limitation basis. However, by equalization, adjusting pH and solids separation this limit should always be attainable. A system to guarantee a lower fluoride value would not be cost effective.

(9) A commenter stated that nitrogen limits should be established for the appropriate subcategories.

EPA's current data base does not support a limitation value for nitrogen based on technology at this time. Nitrogen limits should be set based on water quality considerations until such data or technology are obtained to develop technology based limitations.

(10) Several commenters stated that the subcategory breakdown for silicone into multiproduct plants and fluid product plants is not justified. They stated that an example of this is the different copper limitations of which they believe on a production basis should be similar, since copper is consumed as a catalyst in the same process for each basic producer.

The data basis supports the division of the silicones industry into two subcategories based on hydraulic waste water loads. The copper limitation is based on treatment of copper in the total effluent and not at the waste generation source to a soluble copper limitation.

(11) A commenter stated that the production rate basis for determining specific guidelines was not apparent in the draft development document.

The guidelines are based on actual production rates, except the silicones subcategory, where the guidelines are based on sales of product.

(12) A commenter stated that based on the raw waste loads and treated effluent data in the draft development document the subcategories of epoxy batch and continuous epoxy batch, fusion, and urea and melamine should be in major subcategory IV.

The data base supports the placement of epoxy resins in category III. After further review of the data, urea and melamine resins were placed in subcategory IV.

(13) A commenter suggested that the draft development document guidelines could not be met by most plants producing a variety of phenolic based polymers.

The data base for this industry was reviewed and it was determined that the draft development document proposed limitations were based on a special case not representative of the industry. Appropriate changes have been made in the proposed regulations for BPCTCA, BATEA, and BADT–NSPS.

(14) Some commenters stated that the "new source" values are lower than the "best available" value and that they would expect the reverse to be true.

A "new source" can be designed to operate at a lower waste water flow level than most existing sources. For most existing sources to meet a lower waste water flow level, it would require retrofitting which in most cases would be very expensive and still not attain a waste water flow, which can be designed for in a new facility.

(15) One commenter stated that although the guidelines conform to the wording and intent of the Act, the characterization of the components of the effluent are inexact and incomplete and in some cases the source of the stated effluent parameters are not clearly identified.

It is not within the scope of this project to identify every possible compound, element, or parameter which is present in each waste stream but to identify the constituents of the waste waters which should be subject to effluent limitations guidelines and standards of performance based on a waste treatment technology evaluation and not on water quality criteria or health effects as stated in the Act. The identification as to which chemicals, compounds, elements, etc., which make up the COD and BOD5 wastes from this industry would require a major research program (for which neither time nor funds were available) and are not necessary for the setting of guidelines and standards. The sources of some of the stated effluent parameters are not clearly identified because exact sources, concentrations in effluents, etc., would disclose proprietary process information.

(16) Some commenters requested that Chemical Oxygen Demand (COD) should not be used as a parameter for BPCTCA and BADT (best available demonstrated technology for new source performance standards) since the technology proposed is Biochemical Oxygen Demand (BOD) removal oriented.

For BPCTCA, the COD parameter was recognized as being removed only as a consequence of BOD5 removal. The COD daily and monthly limitations reflect COD removal which occurs with BOD5 removal. The COD/BOD5 ratios were set higher (less stringent) than determined from the available data. The COD limits are therefore liberal and are not meant to be a technology controlling parameter but only to assure the treatment of COD wastes. For BADT, the COD parameter in the proposed regulation does in most cases control the technology design instead of BOD5. The COD basis for BADT has been adjusted such that BOD5 is now the technology controlling parameter.

(17) Several commenters recommended that the effluent limitations and guidelines be expressed as a range of values with allowances for variation.

The plastics manufacturing industry has been categorized and subcategorized in such a manner that the subject range of values would not be appropriate.

In total, four broad process oriented subcategories have been established for the plastics industry for which over thirty-one known product-process segments have been classified. Thirteen of the more significant of these segments were covered by the Phase I effluent limitations guidelines with twenty-seven different sets of values. Phase II covers eleven additional segments with fourteen different sets of limitations guidelines.

In establishing the various segments and sub-segments mentioned above and the associated effluent limitations guidelines, factors such as process, raw waste load, size, location, age and variability of waste treatment effectiveness were considered.

In addition, the industry may, in the case of the 1977 requirements, submit proper evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) requesting that the requirements be adjusted on the basis that factors relating to the equipment of the facilities involved, the processes to be applied or other such factors related to such discharger were not given adequate consideration in the regulations and would adversely affect the ability of the particular facility to meet the established effluent limitations. .

(18) Several commenters stated that the data presented for each subcategory do not demonstrate the reduction capabilities claimed of the BPCTCA defined technologies on a subcategory by subcategory basis.

In many subcategories of this segment of the plastics and synthetics industry, the in-place waste water technology and treatment levels are inadequate. By proper design and application of the defined technologies, the levels proposed are attainable as demonstrated by other subcategories within this industry and other industries such as organics and petroleum refining.

(19) A commenter stated that the data indicate that for thermoplastic polyester resins the effluent BOD5 level is to be 422 mg/l, which is far beyond the range of major subcategory III effluent levels.

The plant from which the data were obtained was a multiproduct plant discharging into a treatment system which based on its design is not considered BPCTCA. There are only three plants in the thermoplastic polyester subcategory and none of these plants were considered meeting BPCTCA. Since the raw waste constituents of thermoplastic polyesters are similar to unsaturated polyester and polyester resin and fiber wastes, the thermoplastic polyester subcategory was placed in major subcategory III.

(20) A commenter stated that the BPCTCA flow basis for alkyd and unsaturated polyester resins is incorrectly

stated as compared to the proposed limitations.

The BPCTCA flow basis is correct. The error was in the calculation of the limits and has been corrected.

(21) A commenter stated that the data presented for suspended solids removal from biological systems averages 52 mg/l which is different than the proposed 30 mg/l basis.

The suspended solids limitations for BPCTCA were based on a 30 ppm average since many plants in the industry achieve this average and in many cases of the data presented, settling aids, coagulants, and other chemical treatments for the reduction of suspended solids were not in practice.

(22) Several commenters stated that a separate variability factor to properly account for temperature effects on biological systems was not included.

Temperature was considered by the variability factors, which have taken into account the day-to-day variability and the month-to-month variability under seasonal conditions in a northern climate.

(23) A commenter stated that the data do not support a 15 mg/l and 25 mg/l basis for BOD5 for BATEA.

The basis for BOD5 guidelines of 15 mg/l and 25 mg/l is based on plants in other subcategories of the plastics and synthetics industry which are currently attaining these limits using controls and technology which are considered BATEA for the plastics and synthetics industry.

(24) A commenter stated that the BATEA TSS level of 10 mg/l has not been demonstrated on the wastes for this industry.

The BATEA level of 10 mg/l is based on technology transfer from petroleum refining and municipal treatment industries since the industry does not currently practice this technology.

(25) A commenter stated that the variability factors were not used according to the text of Draft Development Document for BATEA and BADT–NSPS.

Corrections in the text and use of the variability factors have been made.

(26) A commenter stated that the flow for BADT–NSPS based on the lowest verified rate for each product subcategory is inappropriate since flow values are often set by product quality considerations.

A new source is capable of designing the plant to obtain the lowest possible flows through such methods as choosing the low flow process, recycle reuse systems, and well designed segregated sewer systems.

(27) A commenter stated that the setting of COD levels for BADT–NSPS was not applied consistently.

Corrections in the text and adjustments to the COD values have been made.

Interested persons may participate in this rulemaking by submitting written comments in triplicate to the EPA Information Center, Environmental Protection Agency, Washington, D.C. 20460. Attention: Mr. Philip B. Wisman. Comments on all aspects of the proposed regulation are solicited. In the event comments are in the nature of criticisms as to the adequacy of data which are available, or which may be relied upon by the Agency, comments should identify and, if possible, provide any additional data which may be available and should indicate why such data are essential to the development of the regulations. In the event comments address the approach taken by the Agency in establishing an effluent limitations guideline or standard of performance, EPA solicits suggestions as to what alternative approach should be taken and why and how this alternative better satisfies the detailed requirements of sections 301, 304(b), 306, and 307 of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street SW., Washington, D.C. A copy of preliminary draft contractor reports, the Development Document and economic study referred to above, and certain supplementary materials supporting the study of the industry concerned will also be maintained at this location for public review and copying. The EPA information regulation, 40 CFR Part 2, provides that a reasonable fee may be charged for copying.

All comments received on or before October 21, 1974, will be considered. Steps previously taken by the Environmental Protection Agency to facilitate public response within this time period are outlined in the advance notice concerning public review procedures published on August 6, 1973 (38 FR 21202).

Dated: September 11, 1974.

JOHN QUARLES,
Acting Administrator.

PART 416—PLASTICS AND SYNTHETICS POINT SOURCE CATEGORY

Subpart N—Ethylene-Vinyl Acetate Copolymers Subcategory

Sec.

416.140 Applicability; description of the ethylene-vinyl acetate copolymers subcategory.
416.141 Specialized definitions.
416.142 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
416.143 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
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416.145 Standards of performance for new sources.
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Subpart O—Fluorocarbons Subcategory

416.150 Applicability; description of the fluorocarbons subcategory.
416.151 Specialized definitions.
416.152 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
416.153 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
416.154 [Reserved]
416.155 Standards of performance for new sources.
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Subpart P—Polypropylene Fiber Subcategory

416.160 Applicability; description of the polypropylene fiber subcategory.
416.161 Specialized definitions.
416.162 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
416.163 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
416.164 [Reserved]
416.165 Standards of performance for new sources.
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Subpart Q—Alkyds and Unsaturated Polyester Resins Subcategory

416.170 Applicability; description of the alkyds and unsaturated polyester resins subcategory.
416.171 Specialized definitions.
416.172 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
416.173 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
416.174 [Reserved]
416.175 Standards of performance for new sources.
416.176 Pretreatment standards for new sources.

Subpart R—Cellulose Nitrate Subcategory

416.180 Applicability; description of the cellulose nitrate subcategory.
416.181 Specialized definitions.
416.182 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
416.183 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
416.184 [Reserved]
416.185 Standards of performance for new sources.
416.186 Pretreatment standards for new sources.

Subpart S—Polyamide (Nylon 6/12) Subcategory

416.190 Applicability; description of the polyamide (nylon 6/12) subcategory.
416.191 Specialized definitions.
416.192 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Sec.
416.193 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
416.194 [Reserved]
416.195 Standards of performance for new sources.
416.196 Pretreatment standards for new sources.

Subpart T—Polyester Resins (Thermoplastic) Subcategory

416.200 Applicability; description of the polyester resins (thermoplastic) subcategory.
416.201 Specialized definitions.
416.202 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
416.203 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
416.204 [Reserved]
416.205 Standards of performance for new sources.
416.206 Pretreatment standards for new sources.

Subpart U—Silicones Subcategory

416.210 Applicability; description of the silicones subcategory.
416.211 Specialized definitions.
416.212 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
416.213 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
416.214 [Reserved]
416.215 Standards of performance for new sources.
416.216 Pretreatment standards for new sources.

Subpart V—Epoxy Resins Subcategory

416.220 Applicability; description of the epoxy resins subcategory.
416.221 Specialized definitions.
416.222 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
416.223 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
416.224 [Reserved]
416.225 Standards of performance for new sources.
416.226 Pretreatment standards for new sources.

Subpart W—Phenolic Resins Subcategory

416.230 Applicability; description of the phenolic resins subcategory.
416.231 Specialized definitions.
416.232 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
416.233 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
416.234 [Reserved]
416.235 Standards of performance for new sources.
416.236 Pretreatment standards for new sources.

Subpart X—Urea and Melamine Resins Subcategory

416.240 Applicability; description of the urea and melamine resins subcategory.
416.241 Specialized definitions.
416.242 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
416.243 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
416.244 [Reserved]
416.245 Standards of performance for new sources.
416.246 Pretreatment standards for new sources.

Subpart N—Ethylene-Vinyl Acetate Copolymers Subcategory

§ 416.140 Applicability; description of the ethylene-vinyl acetate copolymers subcategory.

The provisions of this subpart are applicable to discharges resulting from the reaction of vinyl acetate and ethylene and associated processing to manufacture ethylene vinyl acetate copolymers.

§ 416.141 Specialized definitions.

For the purpose of this subpart:

Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 416.142 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the processes applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kkg of product		
BOD5	0.14	0.07
COD	.70	.35
TSS	.35	.19
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.14	0.07
COD	.70	.35
TSS	.35	.19
pH	Within the range 6.0 to 9.0.	

§ 416.143 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.09	0.06
COD	.29	.19
TSS	.05	.04
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.09	0.06
COD	.29	.19
TSS	.05	.04
pH	Within the range 6.0 to 9.0.	

§ 416.144 [Reserved]

§ 416.145 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product)		
BOD5	0.10	0.05
COD	.40	.22
TSS	.05	.04
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.10	0.05
COD	.40	.22
TSS	.25	.04
pH	Within the range 6.0 to 9.0.	

§ 416.146 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the ethylene vinyl acetate copolymers subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 416.145; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for new discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart O—Fluorocarbons Subcategory

§ 416.150 Applicability; description of the fluorocarbons subcategory.

The provisions of this subpart are applicable to discharges resulting from the manufacture of addition type polymers in which all, or a significant portion, of the substituted groups on the carbon atoms in the polymer chain are fluorine and associated processing to manufacture fluorocarbons.

§ 416.151 Specialized definitions.

For the purpose of this subpart, except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 416.152 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	7.0	3.6
COD	13.0	6.7
TSS	18.0	9.9
Fluorides	1.2	.6
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	7.0	3.6
COD	13.0	6.7
TSS	18.0	9.9
Fluorides	1.2	.6
pH	Within the range 6.0 to 9.0.	

§ 416.153 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	3.3	2.2
COD	5.9	4.0
TSS	1.8	1.6
Fluorides	1.2	.6
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	3.3	2.2
COD	5.9	4.0
TSS	1.8	1.6
Fluorides	1.2	.6
pH	Within the range 6.0 to 9.0.	

§ 416.154 [Reserved]

§ 416.155 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	1.6	0.80
COD	2.9	1.4
TSS	.83	.57
Fluorides	1.2	.6
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	1.6	0.80
COD	2.9	1.4
TSS	.83	.57
Fluorides	1.3	.67
pH	Within the range 6.0 to 9.0.	

§ 416.156 Pretreatment standards for for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the fluorocarbons subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 416.155; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart P—Polypropylene Fiber Subcategory

§ 416.160 Applicability; description of the polypropylene fiber subcategory.

The provisions of this subpart are applicable to discharges resulting from the manufacture of polypropylene fibers from polypropylene and associated processing.

§ 416.161 Specialized definitions.

For the purpose of this subpart:

Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

§ 416.162 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.78	0.40
COD	3.9	2.0
TSS	2.0	1.1
O&G	1.0	.5
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.78	0.40
COD	3.9	2.0
TSS	2.0	1.1
O&G	1.0	.5
pH	Within the range 6.0 to 9.0.	

§ 416.163 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.33	0.22
COD	.59	.40
TSS	.18	.16
O&G	.18	.092
pH	Within the range 6.0 to 9.0	
(English units) lb/1000 lb of product		
BOD5	0.33	0.22
COD	.59	.40
TSS	.18	.16
O&G	.18	.092
pH	Within the range 6.0 to 9.0	

§ 416.164 [Reserved]

§ 416.165 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.08	0.04
COD	.14	.07
TSS	.04	.03
O&G	.033	.017
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.08	0.04
COD	.14	.07
TSS	.04	.03
O&G	.033	.017
pH	Within the range 6.0 to 9.0.	

§ 416.166 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the polypropylene fiber subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment stand-

ard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 416.165; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart Q—Alkyds and Unsaturated Polyester Resins Subcategory

§ 416.170 Applicability; description of the alkyds and unsaturated polyester resins subcategory.

The provisions of this subpart are applicable to discharges resulting from the manufacture of alkyds and unsaturated polyester resins and associated processing.

§ 416.171 Specialized definitions.

For the purpose of this subpart, except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 416.172 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.60	0.33
COD	3.0	1.7
TSS	.40	.22
pH	Within the range 6.0 to 9.0	
(English units) lb/1000 lb of product		
BOD5	0.60	0.33
COD	3.0	1.7
TSS	.40	.22
pH	Within the range 6.0 to 9.0	

§ 416.173 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.14	0.10
COD	.74	.52
TSS	.04	.03
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.14	0.10
COD	.74	.52
TSS	.04	.03
pH	Within the range 6.0 to 9.0.	

§ 416.174 [Reserved]

§ 416.175 Standards of performance for new sources.

The following standards of performance established the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.06	0.02
COD	.20	.11
TSS	.008	.006
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.06	0.02
COD	.20	.11
TSS	.008	.006
pH	Within the range 6.0 to 9.0.	

§ 416.176 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the alkyds and unsaturated polyester resins subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 416.175; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart R—Cellulose Nitrate Subcategory

§ 416.180 Applicability; description of the cellulose nitrate subcategory.

The provisions of this subpart are applicable to discharges resulting from the reaction of fibrous cellulose and a mixture of sulfuric and nitric acids and associated processing to manufacture cellulose nitrate.

§ 416.181 Specialized definitions.

For the purpose of this subpart, except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 416.182 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to

factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	26	14.0
COD	85	46.0
TSS	17	9.4
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lbs of product		
BOD5	26	14.0
COD	85	46.0
TSS	17	9.4
pH	Within the range 6.0 to	

§ 416.183 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	9.4	6.9
COD	47.0	34.0
TSS	2.5	2.1
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	9.4	6.9
COD	47.0	34.0
TSS	2.5	2.1
pH	Within the range 6.0 to 9.0.	

§ 416.184 [Reserved]

§ 416.185 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	11.0	6.0
COD	54.0	30.0
TSS	2.7	1.8
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	11.0	6.0
COD	54.0	30.0
TSS	2.7	1.8
pH	Within the range 6.0 to 9.0.	

§ 416.186 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the cellulose nitrate subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 416.185; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart S—Polyamide (Nylon 6/12) Subcategory

§ 416.190 Applicability; description of the polyamide (nylon 6/12) subcategory.

The provisions of this subpart are applicable to discharges resulting from the manufacture of Nylon 6/12 and associated processing.

§ 416.191 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 416.192 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written find-

ing that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available.

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	1.2	0.66
COD	6.0	3.3
TSS	.80	.44
pH	Within the range 6.0 to 9.0.	
(English units) lb/1,000 lb of product		
BOD5	1.2	0.66
COD	6.0	3.3
TSS	.80	.44
pH	Within the range 6.0 to 9.0.	

§ 416.193 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.59	0.27
COD	2.6	1.9
TSS	.13	.11
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.59	0.27
COD	2.6	1.9
TSS	.13	.11
pH	Within the range 6.0 to 9.0.	

§ 416.194 [Reserved]

§ 416.195 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.67	0.37
COD	3.4	1.9
TSS	.17	.11
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.67	0.37
COD	3.4	1.9
TSS	.17	.11
pH	Within the range 6.0 to 9.	

§ 416.196 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the polyamides (nylon 6/12) subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 416.195; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart T—Polyester Resins (Thermoplastic) Subcategory

§ 416.200 Applicability; description of the polyester resins (thermoplastic) subcategory.

The provisions of this subpart are applicable to discharges resulting from the manufacture of the saturated polyester polymers based on poly (ethylene terephthalate) and poly (butylene terephthalate) and associated processing.

§ 416.201 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 416.202 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a

point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	1.4	0.78
COD	22	12
TSS	.95	.52
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	1.4	0.78
COD	22	12
TSS	.95	.52
pH	Within the range 6.0 to 9.0.	

§ 416.203 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.59	0.44
COD	3.1	2.3
TSS	.16	.14
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.59	0.44
COD	3.1	2.3
TSS	.16	.14
pH	Within the range 6.0 to 9.0.	

§ 416.204 [Reserved]

§ 416.205 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.80	0.44
COD	12	6.5
TSS	.20	.14
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.80	0.44
COD	12	6.5
TSS	.20	.14
pH	Within the range 6.0 to 9.0.	

§ 416.206 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the polyester resins (thermoplastic) subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 416.205; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart U—Silicones Subcategory

§ 416.210 Applicability; description of the silicones subcategory.

The provisions of this subpart are applicable to discharges resulting from the manufacture of silicone fluids, greases, emulsions, rubber and resins and associated processing.

§ 416.211 Specialized definitions.

For the purpose of this subpart, except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 416.212 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(a)(1) Except as provided in paragraph (a)(2) of this section, the following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged from the manufacture of silicones in a multiproduct plant by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	26	14
COD	127	70
TSS	17	9.1
Cu	.14	.071
pH	Within the range 6.0 to 9.0.	

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for 30 consecutive days shall not exceed
(English units) lb/1000 lb of product		
BOD_5	26	14
COD	127	70
TSS	17	9.1
Cu	.14	.071
pH	Within the range 6.0 to 9.0.	

(2) An additional allocation for multiproduct plants who manufacture silicone coupling agents, the following quantity or quality of pollutant parameter may be discharged in addition to the limitation set forth in paragraph (a)(1) of this section:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD_5	15	8.2
COD	75	41
TSS	10	5.4
Cu	.083	.042
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD_5	15	8.2
COD	75	41
TSS	10	5.4
Cu	.083	.042
pH	Within the range 6.0 to 9.0.	

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged from the manufacture of silicones in a fluid product plant by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD_5	6.0	3.3
COD	30	17
TSS	4.0	2.2
Cu	.034	.017
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD_5	6.0	3.3
COD	30	17
TSS	4.0	2.2
Cu	.034	.017
pH	Within the range 6.0 to 9.0.	

§ 416.213 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged by the manufacture of silicones in multiproduct plants by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD_5	9.1	6.7
COD	47	35
TSS	2.4	2.0
Cu	.08	.08
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD_5	9.1	6.7
COD	47	35
TSS	2.4	2.0
Cu	.08	.08
pH	Within the range 6.0 to 9.0.	

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged by the manufacture of silicones in fluid product plants by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD_5	1.6	1.2
COD	8.5	6.2
TSS	.44	.37
Cu	.011	.0065
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD_5	1.6	1.2
COD	8.5	6.2
TSS	.44	.37
Cu	.011	.0065
pH	Within the range 6.0 to 9.0.	

§ 416.214 [Reserved]

§ 416.215 Standards of performance for new sources.

(a) The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged by the manufacture of silicones in a multiproduct plant by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD_5	10	5.5
COD	82	46
TSS	2.5	1.7
Cu	.060	.025
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD_5	10	5.5
COD	82	46
TSS	2.5	1.7
Cu	.060	.025
pH	Within the range 6.0 to 9.0.	

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged by the manufacture of silicones in a fluid product plant by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD_5	1.0	0.57
COD	8.5	4.7
TSS	.26	.18
Cu	.0062	.0026
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD_5	1.0	0.57
COD	8.5	4.7
TSS	.26	.18
Cu	.0062	.0026
pH	Within the range 6.0 to 9.0.	

§ 416.216 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the silicones subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new

sources specified in 40 CFR 416.215; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart V—Epoxy Resins Subcategory

§ 416.220 Applicability; description of the epoxy resins subcategory.

The provisions of this subpart are applicable to discharges resulting from the reaction between epichlorohydiun and bisphenol A and/or other reactants which create an epoxy group within the resin and associated processing to manufacture epoxy resins.

§ 416.221 Specialized definitions.

For the purpose of this subpart, except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 416.222 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged by manufacture of batch and continuous epoxy resins (liquid, solid solution) by a point source subject to the provisions of this subpart after application of the best practicable control technoloy currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	3.9	2.1
COD	58	32
TSS	2.6	1.4
Phenolic Compounds	.022	.011
pH	Within the range 6.0 to 9.0	
(English units) lb/1000 lb of product		
BOD5	3.9	2.1
COD	58	32
TSS	2.6	1.4
Phenolic Compounds	.022	.011
pH	Within the range 6.0 to 9.0	

(b) The following limitations establish the quantity or quality of pollutants or pollutant properities, controlled by this paragraph, which may be discharged from the manufacture of epoxy resins by batch fusion (solid and solution) by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.45	0.25
COD	6.7	3.9
TSS	.30	.17
Phenolic Compounds.	.0025	.0013
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.45	0.25
COD	6.7	3.9
TSS	.30	.17
Phenolic Compounds.	.0025	.0013
pH	Within the range 6.0 to 9.0.	

§ 416.223 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged by the manufacture of epoxy resins by batch and continuous processing (liquid, solid, solution) by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	1.3	0.95
COD	6.5	4.8
TSS	.33	.23
Phenolic Compounds.	.0033	.0017
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	1.3	0.95
COD	6.5	4.8
TSS	.33	.23
Phenolic Compounds.	.0033	.0017
pH	Within the range 6.0 to 9.0.	

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged by the manufacture of epoxy resins by batch fusion processing (solid, solution) by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.17	0.12
COD	.88	.65
TSS	.05	.04
Phenolic Compounds.	.00044	.00022
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.17	0.12
COD	.88	.65
TSS	.05	.04
Phenolic Compounds.	.00044	.00022
pH	Within the range 6.0 to 9.0.	

§ 416.224 [Reserved]

§ 416.225 Standards of performance for new sources.

(a) The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged by the manufacture of epoxy resins by batch or by a new source subject to the provisions of

this subpart: continuous processing (liquid, solid, solution) by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	1.2	0.67
COD	12.9	9.2
TSS	.30	.20
Phenolic Compounds.	.0024	.0012
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	1.2	0.67
COD	12.9	9.2
TSS	.30	.20
Phenolic Compounds.	.0024	.0012
pH	Within the range 6.0 to 9.0.	

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged by the manufacture of epoxy resins by batch fusion processing (solid, solution) by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.19	0.11
COD	2.1	1.5
TSS	.05	.03
Phenolic Compounds.	.00038	.00019
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.19	0.11
COD	2.1	1.5
TSS	.05	.03
Phenolic Compounds.	.00038	.00019
pH	Within the range 6.0 to 9.0.	

§ 416.226 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the epoxy resins subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 416.225; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart W—Phenolic Resins Subcategory

§ 416.230 Applicability; description of the phenolic resins subcategory.

The provisions of this subpart are applicable to discharges resulting from the reaction of phenol or a substituted phenol such as creosol or resorcinol and an aldehyde such as formaldehyde or acetaldehyde and associated processing to manufacture phenolic resins.

§ 416.231 Specialized definitions.

For the purpose of this subpart:

Except as provided below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 416.232 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of product		
BOD5	6.7	3.7
COD	34	19
TSS	2.7	1.5
Phenolic Compounds.	.023	.011
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	6.7	3.7
COD	34	19
TSS	2.7	1.5
Phenolic Compounds.	.023	.011
pH	Within the range 6.0 to 9.0.	

§ 416.233 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	1.3	0.90
COD	6.8	5
TSS	.35	.20
Phenolic Compounds.	.0035	.0018
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	1.3	0.90
COD	6.8	5
TSS	.35	.20
Phenolic Compounds.	.0035	.0018
pH	Within the range 6.0 to 9.0.	

§ 416.234 [Reserved]

§ 416.235 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	1.3	0.69
COD	34	19
TSS	.31	.21
Phenolic Compounds	.0025	.0013
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	1.3	0.69
COD	34	19
TSS	.31	.21
Phenolic Compounds	.0025	.0013
pH	Within the range 6 0 to 9.0.	

§ 416.236 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the phenolic resins subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 416.235; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart X—Urea and Melamine Resins Subcategory

§ 416.240 Applicability; description of the urea and melamine resins subcategory.

The provisions of this subpart are applicable to discharges resulting from the reaction of urea or melamine with formaldehyde and associated processing to manufacture urea or melamine resins.

§ 416.241 Specialized definitions.

For the purpose of this subpart:

Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 416.242 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.38	0.20
COD	5.5	3.2
TSS	.25	.13
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.38	0.20
COD	5.5	3.2
TSS	.25	.13
pH	Within the range 6.0 to 9.0.	

§ 416.243 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.08	0.06
COD	.13	.09
TSS	.021	.017
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD5	0.08	0.06
COD	.13	.09
TSS	.021	.017
pH	Within the range 6.0 to 9.0.	

§ 416.244 [Reserved]

§ 416.245 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations: Maximum for any one day	Effluent limitations: Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kkg of product		
BOD5	0.11	0.06
COD	.18	.10
TSS	.04	.02
pH	Within the range 6.0 to 9.0.	

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	(English units) lb/1000 lb of product	
BOD5	0.11	0.06
COD	.18	.10
TSS	.04	.02
pH	Within the range 6.0 to 9.0.	

§ 416.246 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the urea and melamine resins subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 416.245; provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

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